



CERTIFICATE OF COMPLIANCE	NRCC-ENV-05-E
Fenestration Certificate Label	(Page 1 of 2)
Project Name:	Date Prepared:

This form is only used when an NFRC Label Certificate is not available. A separate (NRCC-ENV-05-E formally FC-1) Label Certificate Form is required for each different fenestration product or different types of Fenestration.

*Method 1: For buildings with **less** than 1,000 ft² of site-built fenestration may optionally use either CEC Default Tables 110.6-A and 110.6-B, **Method 1**, or the Alternative Calculation Nonresidential Reference Appendix NA6, **Method 2**. Enter the total U-factor_T, SHGC_T and VT_T (Optional) in the following boxes below.*

*Method 2: For buildings with **greater** 1,000 ft² of site-built fenestration without NFRC Label Certificate, only one option is available; use CEC Default Tables 110.6-A and 110.6-B. Use **Method 1** only below and enter the total U-factor_T, SHGC_T and VT_T in the following boxes below.*

A. GENERAL INFORMATION	
1	Climate Zone:
2	Total Number of like Fenestration products:
3	Total square footage of like Fenestration:

B. METHOD 1				
U-FACTOR INFORMATION from default, See TABLE 110.6-A				
1	Frame Type:	Metal	Metal With Thermal Break	Nonmetal
2	Product Type:	Operable	Fixed	Greenhouse/Garden Window Doors Skylights
3	Glazing Type:	Single Pane	Double Pane	Glass Block
4	Enter the appropriate value from Table 110.6-A			U-factor_T =
SOLAR HEAT GAIN COEFFICIENT INFORMATION from default, See TABLE 110.6-B				
5	Product Type:	Operable	Fixed	
6	Glazing:	Clear	Tinted	
7	Enter the appropriate value from Table 110.6-B			SHGC_T =
VISIBLE TRANSMITTANCE from Reference Nonresidential Appendix NA6				
8	Product Type:	Casement/Awning Sliding Fixed	Curtainwall/Storefront)/Site-built or Manufactured Skylights(Non-curb mounted)	Skylights Manufactured (Curb Mounted)
9	Enter Center-of-Glass for VT _C value:			VT_C =
10	Calculate VT _T = VT _F x VT _C (See Equation NA6-3)			VT_T =

C. METHOD 2				
Alternative Calculation Nonresidential Reference Appendix NA6				
NA6 Default Calculation - Enter Center of Glass (COG) value from Manufacturer's Documentation below:		Calculated Values		
1	STEP 1: Enter Center-of-Glass for U-factor _C or the U _C value:	4	STEP 4: U-factor _T = C ₁ + (C ₂ X U _C)	U-factor_T =
2	STEP 2: Enter Center-of-Glass for SHGC _C value:	5	STEP 5: SHGC _T = 0.08 + (0.86 x SHGC _C) (See Equation NA6-2)	SHGC_T =
3	STEP 3: Enter Center-of-Glass for VT _C value:	6	STEP 6: VT _T = VT _F x VT _C (See Equation NA6-3)	VT_T =

D. ATTACHED MANUFACTURER'S LITERATURE	
1	Manufacturer's literature must match the Product Type, Frame Type, Glazing, Center-of-Glass (COG) U-factor _C , SHGC _C and VT _C information needed to calculate the Default U-factor _T , SHGC _T , and VT _T .



CERTIFICATE OF COMPLIANCE		NRCC-ENV-05-E
Fenestration Certificate Label		(Page 2 of 2)
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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name:	Documentation Author Signature:
Company:	Signature Date:
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:
RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California:	
<ol style="list-style-type: none"> The information provided on this Certificate of Compliance is true and correct. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer). The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. 	
Responsible Designer Name:	Responsible Designer Signature:
Company :	Date Signed:
Address:	License:
City/State/Zip:	Phone:

California Energy Commission Default U-Factor and SHGC Label Certificate

This form is used when no NFRC Label Certificate is available for the specified fenestration product to be installed. Two options are allowed when no NFRC certificate is available. Method 1: For site-built fenestration of 1,000 square feet and greater use the Energy Commission's Default Table 110.6-A and Table 110.6-B in §110.6 of the Standards or Method 2: Use the Alternative Calculation found in the Reference Nonresidential Appendix NA6 for buildings with less than 1,000 ft² of glass, this includes skylights. Use the appropriate Method to determine the Total U-factor, SHGC and VT.

Note: NRCC-ENV-05-E formally FC-1 is now simplified and combined together as one form.

Instructions to NRCC-ENV-05-E**A. GENERAL INFORMATION**

1. Enter the Climate Zone in where the fenestration is being installed
2. Enter the total number of like fenestration products. Note that all unlike fenestration products will require a separate NRCC-ENV-05-E.
3. Enter total square footage of like Fenestration. Note this should match the surface area indicated in NRCC-ENV-01-E for each different Tag/ID.

B. METHOD 1

For buildings with **less than 1,000 ft²** of site-built fenestration may optionally use either CEC Default Tables 110.6-A and 110.6-B, use Method 1; Or the Alternative Calculation Nonresidential Reference Appendix NA6, Method 2.

Alternatively when buildings with **greater 1,000 ft²** of site-built fenestration without NFRC Label Certificate, only one option is available; use CEC Default Tables 110.6-A and 110.6-B use Method 1 only.

U-FACTOR INFORMATION

1. **Frame Type:** Select the appropriate frame type of the product being installed; Metal, Metal with Thermal Break and Nonmetal. Documentation from the manufacture must indicate the use of Metal with Thermal Break for each Tag/ID identified and should be attached to this NRCC-ENV-05-E form.
2. **Product Type:** Select the appropriate product type of the product being installed; Operable, Fixed, Greenhouse/Garden Window, Doors, and Skylight.
3. **Glazing Type:** Select the appropriate glazing type of the product being installed; either Operable or Fixed
4. Enter the appropriate value from Table 110.6-A. This value must match on what has been selected in item B.1, B.2, and B.3.

SOLAR HEAT GAIN COEFFICIENT INFORMATION

5. Product Type: Select either Operable or Fixed. The selection should match the liked fenestration and Tag/ID
6. Glazing: Select either Clear or Tinted. The selection should match the liked fenestration and Tag/ID
7. Enter the appropriate value from Table 110.6-B. This value must match on what has been selected in item B.5, and B.6.

VISIBLE TRANSMITTANCE

8. **Product Type:** Select the appropriate product type of the product being installed; Casement/Awning, sliding, fixed, curtainwall/storefront/site-built or Manufactured Skylights without curb mounting or skylights with curb mounting.
9. From the manufactures literature or specifications enter the center-of-glass, VT_c.
10. Use equation NA6-3, select the appropriate VT_F and calculate VT_{Total}

C. METHOD 2

For buildings with **less than 1,000 ft²** of site-built fenestration may optionally use **Method 1**.

1. Follow Step 1 and Enter Center-of-Glass for U-factor_c or the U_c value:
2. Follow Step 2 and Enter Center-of-Glass for SHGC_c.
3. Follow Step 3 and Enter Center-of-Glass for VT_c:
4. Calculate the Total U-factor by using Equation NA6-1 and use Table NA6-5 for C1 and C2 values. In addition use Step 1 (U_c) value in the equation and calculate U-factor_{Total}.
5. Calculate the Total SHGC by using equation NA6-2 and use Step 2 (SHGC_c) value in the equation and then calculate the value for SHGC_{Total}.
6. Calculate the Total VT by using equation NA6-3 and use Step 3 (VT_c) value in the equation and then calculate the value for VT_{Total}.

D. ATTACHED MANUFACTURER'S LITERATURE

1. Manufacturer's literature must be match the Product Type, Frame Type, Glazing, Center-of- Glass (COG) U-factor_c, SHGC_c and VT_c information needed to calculate Method 1 or Method 2.